

## WHAT IS CLAIMED IS:

1. An apparatus for shipping items, wherein the apparatus comprises:  
a container; and  
5 a memory device for storing shipping information, wherein the memory device is affixed to the container, and wherein the shipping information includes:  
a unique item identifier,  
origination information,  
intermediate destination information, and  
10 final destination information; and  
an interface device connected to the memory device, wherein the interface device is configured to allow read-write access to the memory.
2. The apparatus as recited in claim 1, wherein the apparatus further comprises a  
15 processor and a power supply connected to the memory and the interface.
3. The apparatus as recited in claim 2, wherein the processor is configured to upload information stored in the memory device to a network via the interface.
- 20 4. The apparatus as recited in claim 3, further comprising a temperature sensor, wherein the processor is configured to periodically store temperature data from the temperature sensor into the memory, and wherein the uploaded information includes at least part of the temperature data.
- 25 5. The apparatus as recited in claim 3, further comprising an environment sensor, wherein the processor is configured to periodically store environmental data from the environment sensor into the memory, and wherein the uploaded information includes at least part of the environmental data.

6. The apparatus as recited in claim 1, further comprising a carrier configured to hold two or more containers.
7. The apparatus as recited in claim 6, wherein the carrier comprises a carrier memory device, wherein the carrier memory device is configured to store origination and destination information for the carrier.
8. The apparatus as recited in claim 6, wherein the carrier comprises a carrier memory device, wherein the carrier memory device is configured to store information about the containers stored within the carrier.
9. The apparatus as recited in claim 6, wherein the carrier comprises a rigid frame and one or more locking mechanisms for each container storable within the rigid frame.
10. The apparatus as recited in claim 6, wherein the carrier comprises a cover configured to prevent unauthorized access to the containers in the carrier.
11. The apparatus as recited in claim 6, wherein the carrier comprises lock clips configured to prevent unauthorized removal of the containers in the carrier.
12. The apparatus as recited in claim 1, wherein the memory device is housed in a plastic case that is configured to be packed inside the container.
13. The apparatus as recited in claim 1, wherein the interface device provides an infrared (IR) communications link to the memory.
14. The apparatus as recited in claim 1, wherein the interface device provides a radio communications link to the memory.

15. The apparatus as recited in claim 2, wherein the apparatus further comprises a global positioning system (GPS) receiver and a wireless transmitter coupled to the processor, wherein the processor is configured to periodically transmit position information from the receiver using the wireless transmitter.

5

16. An apparatus for shipping items, wherein the apparatus comprises:

a means for storing items to shipped; and

a memory means for storing shipping information about the items to be shipped, wherein the memory means is affixed to said means for storing or contained within said means for storing, wherein the shipping information includes:

10

a unique item identifier,

origination information,

intermediate destination information, and

final destination information; and

15

a means for interfacing connected to the memory means, wherein the means for interfacing is configured to allow read-write access to the memory means.

17. An apparatus for processing an item being shipped, wherein the apparatus comprises:  
a processor;

20

a data interface coupled to the processor;

a power supply coupled to the processor; and

a network connection coupled to the processor, wherein the processor is configured to cause the data interface to access a memory device storing shipping information about a container, wherein the shipping information includes routing information for one or more intermediate destinations and a final destination, wherein the processor is configured to use the network connection to connect to a server, wherein the processor is configured to read and transmit information from the memory device to the server, wherein the processor is configured to receive

25

updated routing information from the server and store the updated routing information to the memory device.

18. The apparatus of claim 17, wherein the data interface is a radio link.

5

19. The apparatus of claim 17, wherein the data interface is an infrared (IR) link.

20. The apparatus of claim 17, wherein the data interface is an electrical signal link.

10 21. The apparatus of claim 17, wherein the power supply is a battery or solar panel.

22. The apparatus of claim 17, wherein the apparatus is hand-held.

15 23. The apparatus as recited in claim 17, wherein the apparatus further comprises an input mechanism that allows an operator to enter information to update the data file in the memory device.

20 24. The apparatus of claim 17, wherein the apparatus further comprises one or more digital cameras connected to the processor, wherein the processor is configured to store images from the one or more digital cameras in the memory device.

25 25. The apparatus of claim 17, wherein the apparatus further comprises a digital scale connected to the processor, wherein the processor is configured to compare a weight measured by the digital scale with weight information stored in the memory device.

26. The apparatus of claim 17, wherein the apparatus further comprises a conveyer belt configured to move the container.

27. The apparatus of claim 17, wherein the apparatus further comprises an automated arm configured to insert or remove the container from a carrier.

28. The apparatus of claim 17, wherein the network connection is a telephone modem.

5

29. The apparatus of claim 17, wherein the network connection is a wireless modem.

30. The apparatus of claim 17, wherein the network connection is configured to access a local area network (LAN).

10

31. The apparatus of claim 17, wherein the network connection is configured to access the Internet.

32. The apparatus of claim 17, wherein the processor is configured to convey information from the memory device to the server via the Internet.

15

33. A carrier for shipping items, wherein the carrier comprises:

a plurality of storage locations each configured to store a container, wherein each container includes a container memory device, wherein each storage location is configured to permit a container stored therein to be removed without removing other storage containers stored in other storage locations; and

20

a carrier memory device configured to store destination information about the carrier, wherein the carrier memory device allows read-write access to the stored destination information.

25

34. The carrier of claim 33, wherein the carrier is configured to store an over-sized container using two or more of the storage locations.

35. The carrier of claim 33, wherein the carrier is configured to permit access to the memory devices of the stored containers.

36. The carrier of claim 33, wherein the memory device is further configured to store the following information for each container in the carrier:

a unique container identifier,  
origination information,  
intermediate destination information, and  
final destination information.

37. The carrier of claim 33, wherein the carrier further comprises an interface, a processor and a power supply each coupled to the carrier memory device.

38. The carrier of claim 37, wherein the processor is configured to upload information stored in the carrier memory device to a network via the interface.

39. The carrier of claim 38, further comprising a temperature sensor, wherein the processor is configured to periodically store temperature data from the temperature sensor into the carrier memory device, and wherein the uploaded information includes at least part of the temperature data.

40. The carrier of claim 38, further comprising an environment sensor, wherein the processor is configured to periodically store environmental data from the environment sensor into the carrier memory device, and wherein the uploaded information includes at least part of the environmental data.